



Quarterly Project Status

July 27, 2005

Vashon-Maury Island
Water Resources Evaluation

July 27, 2005



Quarterly Review

- Ongoing monitoring overview
 - WQ
 - WL survey
- Modeling update
- Monitoring well installation update
- NEW GW Web Page
- Budget

July 27, 2005



Water Quality Monitoring

- Sampling completed in June (20th-23rd)
 - 14 of 20 sites had organic sampling
- No detected organics
 - except bis(2-ethylhexyl)adipate [lab contamination]
 - Cl-pest, OP-pest, Cl-herbs, EDC
- Nitrate, chloride, arsenic
 - Results will be present in annual data report

July 27, 2005



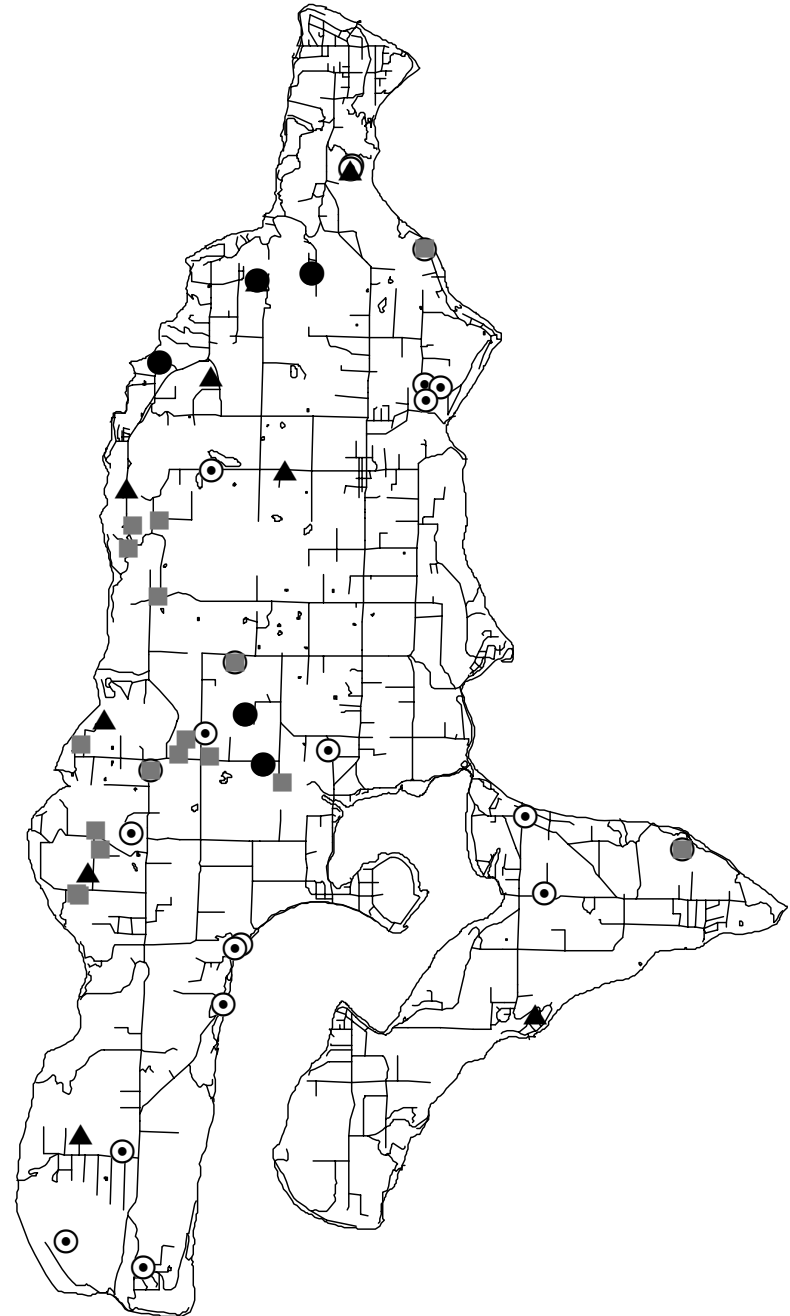
Island-Wide Surveys

- Well water level survey planned
 - Goal = 20 to 30 wells monitored
 - Placed Ad in Beachcomber for 2 wks
 - Got 8 volunteers
 - Measurements in July/Aug, Sept, Dec
- Total (possible) WL survey sites
 - 39 sites

July 27, 2005

Potential WL survey sites

Circles (filled) = active WL sites (5)
Circles (dots) = vol. WL sites (20)
Triangles = active WQ sites (9)
Squares = previous WQ sites (17)



July 27, 2005



Island Monitoring cont'd

- Island-Wide Stream measurements
 - done in Sept to coincide with WL survey
- Stream and Precipitation gaging continuing
- All monitoring data to be presented in annual data report

July 27, 2005

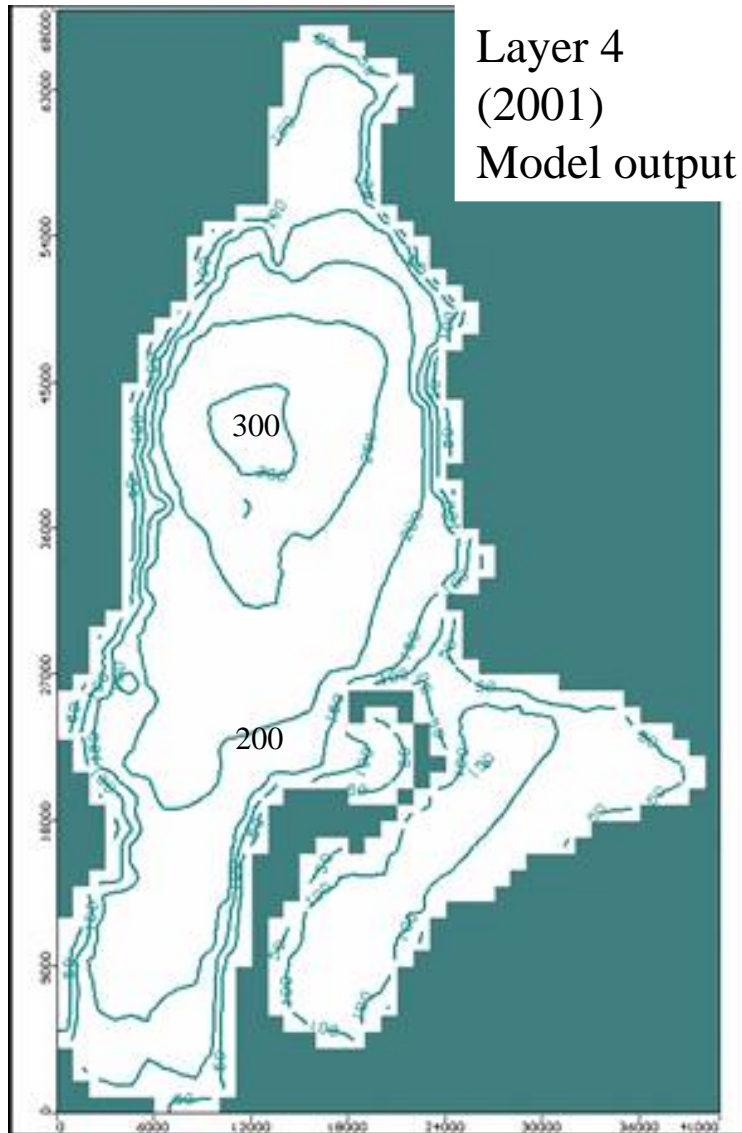


Modeling

- Phase I model completed
- Phase I model report in draft
 - behind schedule
- Phase I modeling Peer Review
 - tentatively set for late 2005
- Phase II surface water modeling begins in fall 2005

July 27, 2005

Water Level Contours



July 27, 2005

Groundwater Balance (entire VMI)

| <u>In</u> | | <u>Out</u> | |
|------------|-------------|---------------|-------------|
| ■ Recharge | 25877 | ■ Puget Sound | 24366 |
| ■ OSS | 4258 | ■ River | 4166 |
| ■ Rivers | 350 | ■ Wells | 1224 |
| | | ■ Springs | 729 |
| total: | <hr/> 30485 | total | <hr/> 30485 |

Units = acre-feet/year

July 27, 2005



Water Balance - comparison

inflows

+ Precip

- ET

- runoff

GW inflow

outflows

Puget sound

Streams

Wells

Springs

| WRE | Carr | GWMP |
|-----------|-----------|-----------|
| af/yr | af/yr | af/yr |
| 80040 | 78857 | 91130 |
| 32026 40% | 39428 50% | 36170 40% |
| 17529 22% | 29571 38% | 21285 23% |
| 30485 38% | 9857 13% | 33675 37% |
| 24366 30% | 1976 3% | 12895 14% |
| 4166 5% | 7881 10% | 20780 23% |
| 1224 | | |
| 729 | | |
| 30485 38% | 9857 12% | 33675 37% |
| 80040 | 78857 | 91130 |

July 27, 2005



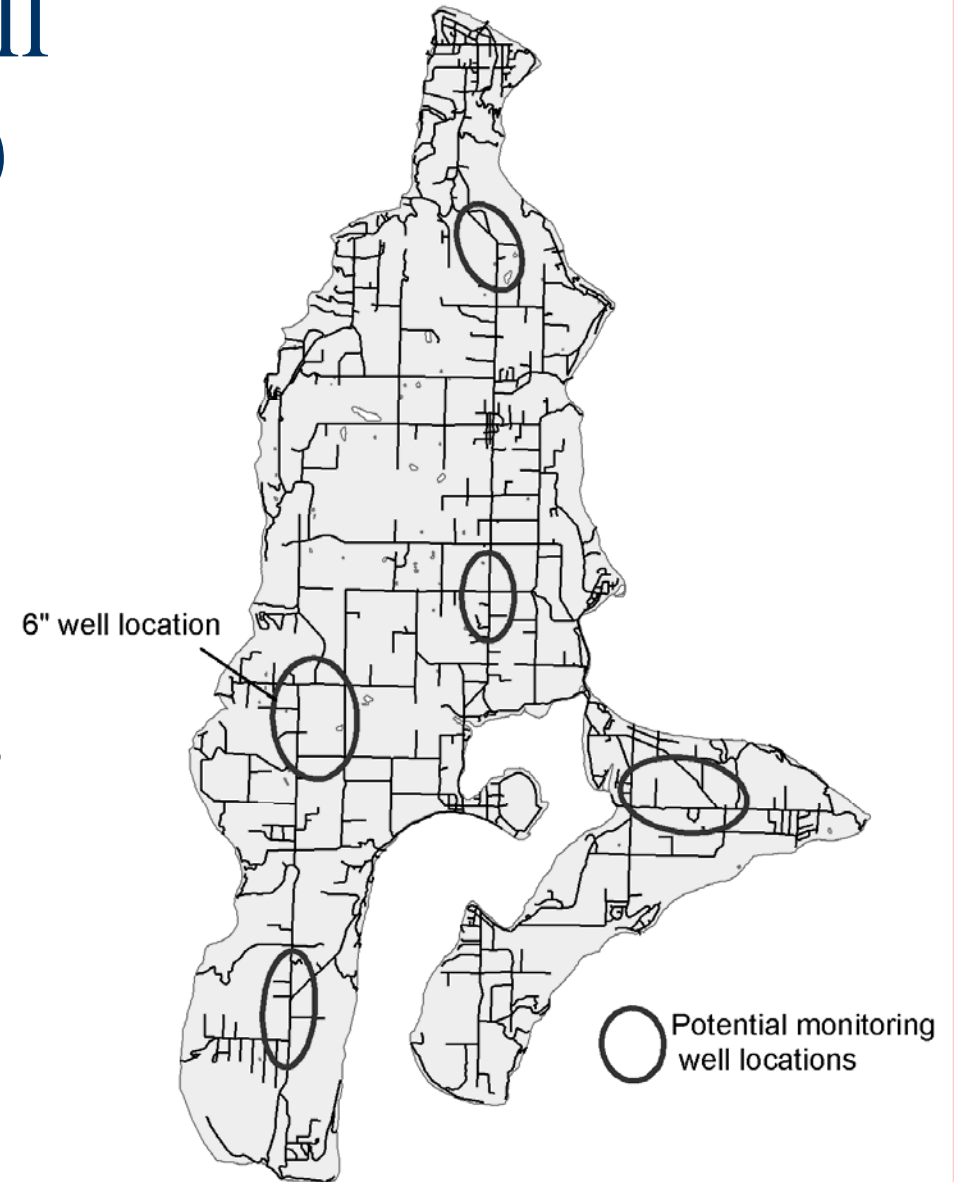
Monitoring Well Installation

- Scoping & site locations (next slide)
- About 6 wells planned
- Working with King County DOT
- Need to balance
 - Cost, locations, depths, drilling methods

July 27, 2005

Monitoring well sites (tentative)

- 5 areas
- 6 wells
 - 5 - 2" wells
 - 1 - 6" well
- Estimated depths between 250' to 350' each.



July 27, 2005



New Groundwater webpages!

- Check out new GW webpages
- Able to download data
- Search via i-Map
- Check out:
<http://dnr.metrokc.gov/wlr/wq/groundwater.htm>

July 27, 2005



2005 Budget

- Project budget for 2005 is \$377,371
- Expenses to date: ~\$105,612
 - 28% of our budget
- Project “big- ticket” items coming in the next two quarters:
 - Monitoring well installation (121K)
 - Phase II modeling (55K)
 - GW water quality sampling (15K) - done

July 27, 2005